Speech Synthesis Integration in OJS

The project

The aim was to improve the accessibility of articles in the UiT's open access journals (Septentrio Academic Publishing) by making them more compatible with text-to-speech software.

Normally, articles are published only in PDF format, which for various reasons is not ideal for accessibility: PDFs do not adjust well to different screen sizes, and often lack semantic content, making navigational 'tabbing' and interaction with assistive technologies challenging.

The project aimed to develop a simple workflow for the conversion of submitted manuscripts from Word format to XML, specifically EPUB, using open source software and the OJS platform.

Our approach

Initially, our approach centered on adapting documents with specific markup parameters for speech synthesis software, utilizing tools such as SSML and CSS Speech Module, which proved labor-intensive.

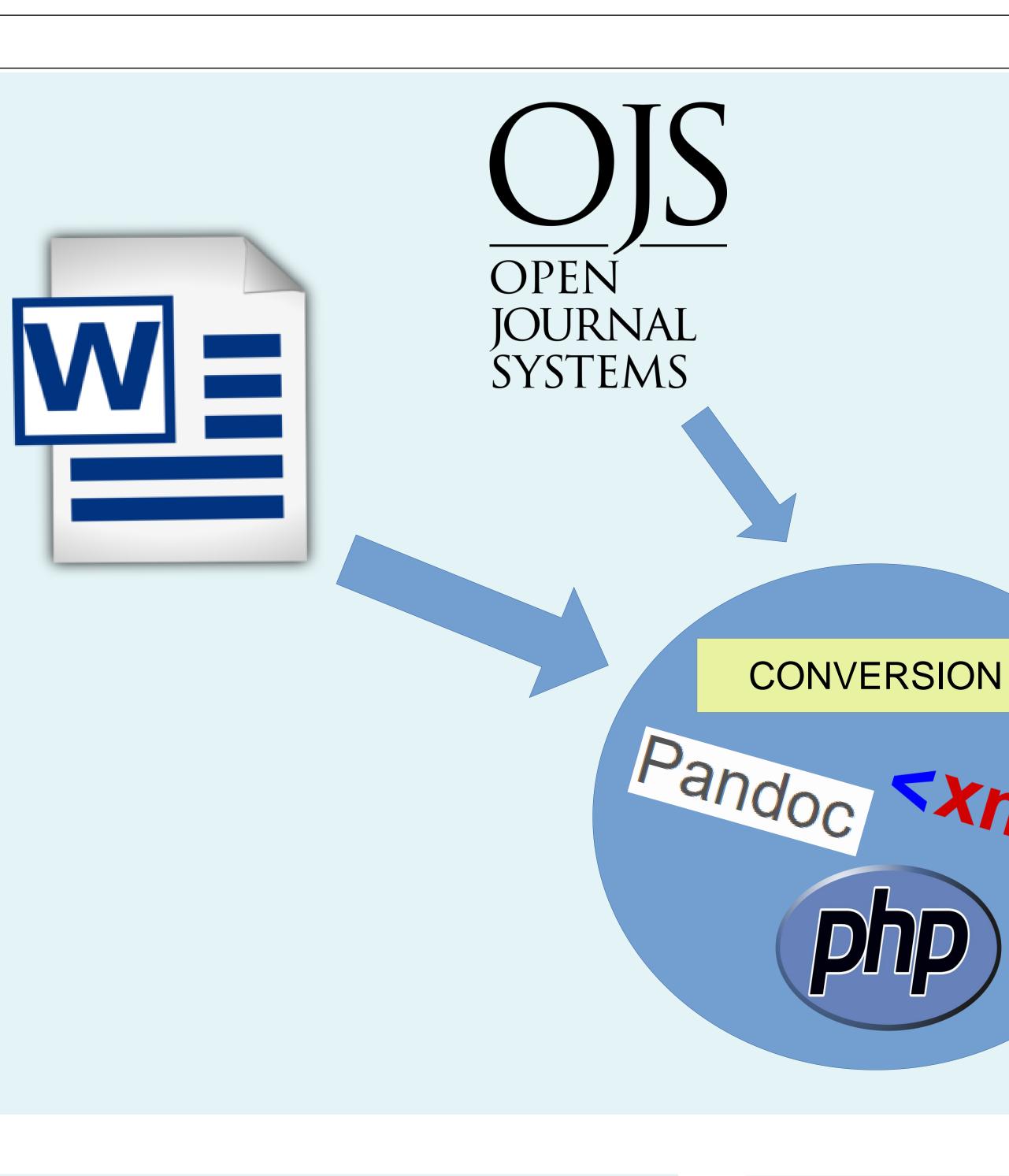
Transitioning to a second phase, we automated the conversion from Word to a standard, accessible EPUB format using standardized document templates, aiming to simplify production for authors and editors, minimize post-processing, and ensure compliance with accessibility standards and the requirements of most speech synthesis software.

Metadata

EPUB documents support full Dublin Core metadata, which can be retrieved automatically from OJS or edited manually with easy to use tools.



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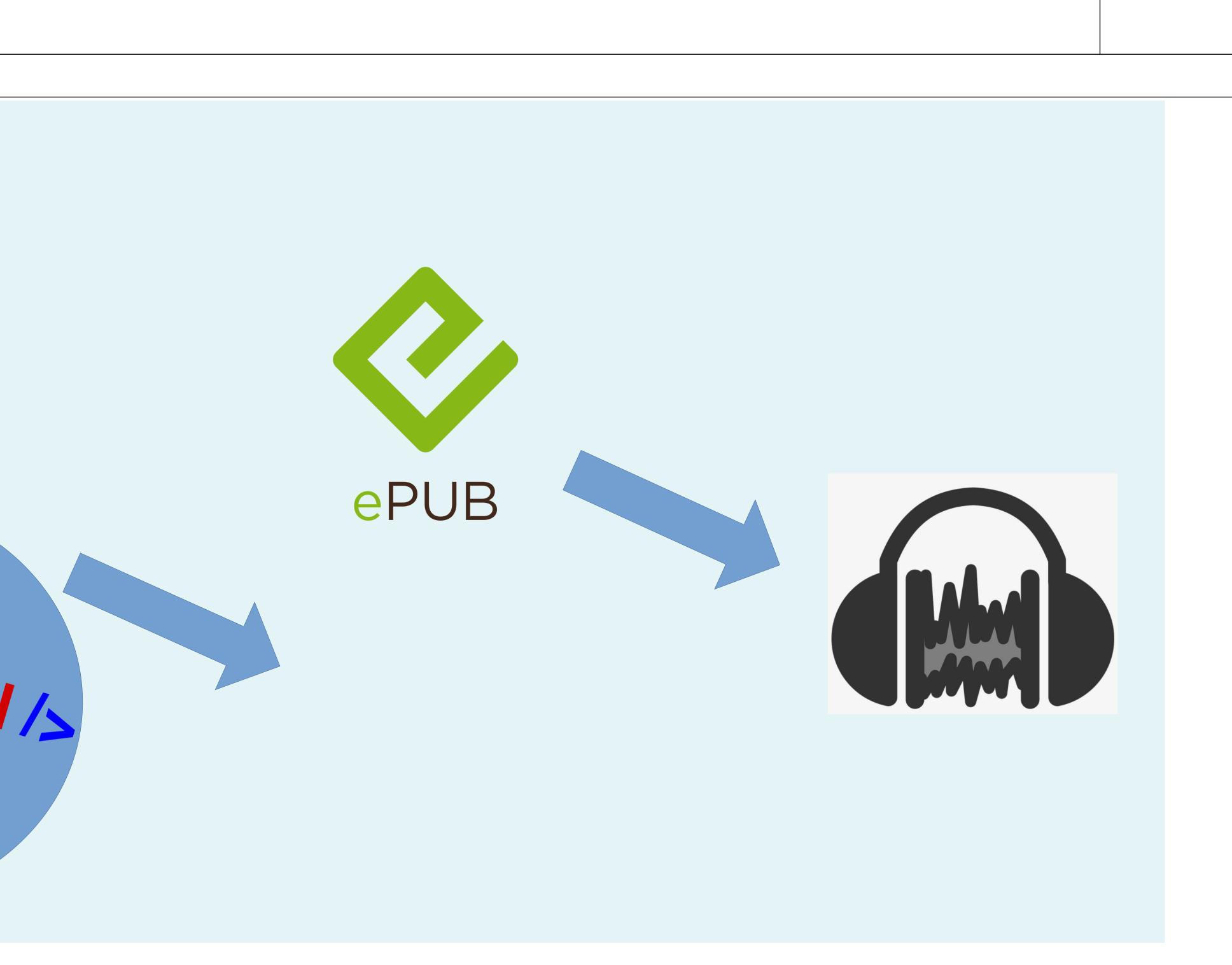
Document conversion tool

Upload File
Choose File No file chosen
Journal Name:
Article Submission Id:
Upload

Step-by-step

Authors submit their final draft in accordance with the document template available on the journal's website. Both the author and the editor are responsible for ensuring that the correct metadata is added in OJS. Once this is done, the editor can upload the Word file to our conversion page, upon which a Zip file with the manuscript in the formats PDF, EPUB, JATS XML, and HTML is generated. The editor then adds one or more "Galleys" to the article and uploads the files the journal prefers, such as PDF and EPUB.

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